SD

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,353	03/09/2001	Mary DuVal	032350.B258	7441

23494 7590 07/12/2005

TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER	
REFAI, RAMSEY	

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/802,353	DUVAL ET AL.	
	Examiner	Art Unit	
	Ramsey Refai	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Responsive to Amendment received on December 17, 2004. Independent claims 1 and 12 have been amended. No claims were canceled. No new claims were added. Claims 1-24 remain pending examination.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 1, 3, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the content" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the frame buffer" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the microprocessor" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 4, 10, 12, 13, 16, 17, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stork et al (U.S. Patent No. 6,104,380) in view of Bodin et al (U.S. Patent No. 6,311,223) and in further view of Schwartz et al (U.S. Patent No. 6,473,609).

5. As per claim 1, Stork et al teach a display system for displaying internet content, comprising:

an access device having a display unit and operable to access HTML commands from a network and wirelessly transmit the content **(see Figure 1, column 4, lines 31-67, column 3, lines 42-48, abstract)**

a display device comprising a radio frequency receiver operable to receive the HTML commands from the access device **(see Figure 1, column 4, line 35- column 5, line 24)**.

6. Stork et al fail to explicitly teach the display device comprises a processor programmed to interpret the HTML commands and to generate pixel data, based on the HTML commands; and a display engine operable to receive the pixel. However, Bodin et al teach a display engine operable to receive the pixel data from the processor and to display on the basis of the pixel data (column 4, lines 10-20; display 38 displays images); a processor programmed to interpret the

HTML commands and to generate pixel data, based on the HTML commands, suitable for a rendered display (column 3, line 35- column 4, line 20; CPU).

7. Stork et al also fail to teach the access device access HTML commands wirelessly from a network. However, Schwartz et al teach access devices such as PDAs and cellular phones that provide wireless access to the Internet **(see column 1, lines 55-67).** It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Stork et al, Bodin et al, and Schwartz et al because doing so would create a system that provides a user with the ability to obtain network data wirelessly and forward the network data to a display device such as a projector in order to present the obtained network data to a group of viewers, i.e. during a presentation.

8. As per claim 2, Stork et al fail to teach a device wherein the receiver is further operable to receive data files associated with the HTML commands.

9. However, Schwartz shows a radio frequency receiver operable to receive incoming and outgoing data signals (column 10, line 25-35). These signals contain messages, which can be HTML files (column 8, lines 45-67). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's inventions to combine the teachings of Stork et al, Bodin et al and Schwartz et al to create a wireless display device that comprises a short range radio frequency receiver operable to receive HTML commands because it would provide mobility by allowing the user to view web pages wirelessly so that for example, stockholders can view stock activity when they are traveling in order to stay current with stock value.

10. As per claim 4, Stork et al fail to teach a display device wherein the receiver is further operable to receive XML data representing commands for operation of the display device, and wherein the processor is further programmed to interpret the XML data.

11. However, Schwartz shows a radio frequency transceiver operable to receive incoming and send outgoing data signals (column 10, line 25-35). These signals contain messages, which can be XML files (column 8, lines 45-67). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's inventions to combine the teachings of Stork et al, Bodin et al and Schwartz et al to create a wireless display device that comprises of a receiver operable to receive XML data because it would provide mobility by allowing the user to view web pages wirelessly. Using XML data it would provide greater flexibility in organizing and presenting information than possible with HTML.

12. As per claim 10, Stork et al teach the processor is an embedded processor **(Figures 1 and 3).**

13. Claims 12, 13, 16, and 17 contain similar limitations as claims 1, 2, and 4 above, therefore are rejected under the same rationale.

14. As per claim 22, Stork et al fails to teach a method wherein the receiving steps are performed by receiving the HTML commands and display operation data from a mobile Internet access device. However, Schwartz show a wherein a RF transceiver receives incoming and outgoing data signals (column 10, lines 25-35) wherein these signals are html files (column 10,

lines 5-20) and display operation data (column 10, lines 35-55) from a PDA with Internet capability (column 1, lines 55- 67). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's inventions to combine the teachings of Stork et al, Bodin and Schwartz to create a wireless display device with a two way RF transceiver that receives HTML commands and display operations from a mobile internet access device because doing can allow a mobile presenter to use a PDA to present his information through a projector. Doing so lightens travel load, reduces setup time and gives the ability to operate a computer anywhere in the conference room.

15. Claim 5, 11, 18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stork et al (U.S. Patent No. 6,104,380) in view of Bodin et al (U.S. Patent No. 6,311,223) in further view of Schwartz et al (U.S. Patent No. 6,473,609) and yet in further view of Richardson et al (U.S. Patent No. 6,028,764).

16. As per claim 5, 11, 18 and 23, Stork et al fail to teach a display device wherein the receiver operates in accordance with Bluetooth specifications or wherein the receiver operates in accordance with specifications.

17. However, Richardson shows a display screen that uses Bluetooth technology to communicate to the housing (abstract and column 3, line 57 – column 4, line 10) and shows a display screen that uses Infrared (IrDA) technology to communicate to the housing (abstract and column 3, lines 5-20). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Stork et al, Bodin et al, Schwartz et

al, and Richardson to create a display device that communicates using Bluetooth technology or IrDA technology because doing so would provide greater flexibility by allowing different types of devices that use different techniques to communicate with the display device.

18. Claims 7 –9, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stork et al (U.S. Patent No. 6,104,380) in view Bodin et al (U.S. Patent No. 6,311,223) and in further view of Schwartz et al (U.S. Patent No. 6,473,609) and yet in further view of MacAulay et al (U.S. Patent No. 6,663,560).

19. As per claim 7, 8 and 20-21, Stork et al fail to teach a display device wherein the display engine has a spatial light modulator for rendering displays and wherein the spatial light modulator is a digital micromirror device.

20. However, MacAulay show viewing devices that comprise a spatial light modulator, which can be a digital micromirror device (abstract and column 8, lines 10-40). It would have been obvious for one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Stork et al, Bodin et al, Schwartz et al, and MacAulay to create a display device with a digital micromirror device because doing so would allow images to be displayed brighter, sharper, and more realistic.

21. As per claim 9, Stork et al fail to teach a display device wherein the receiver is part of a two way RF transceiver.

22. However, However, Schwartz shows a radio frequency transceiver operable to receive incoming and send outgoing data signals (column 10, line 25-35). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's inventions to combine the teachings of Stork et al, Bodin et al, Schwartz et al, and MacAulay to create a wireless display device with a two way RF transceiver because doing so would allow the display device to communicate by sending and receiving data This would allow for the ability to connect the display device to a network.

23. Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stork et al (U.S. Patent No. 6,104,380) in view of Bodin et al (U.S. Patent No. 6,311,223) in further view of Schwartz et al (U.S. Patent No. 6,473,609) and yet in further view of Lemilainen et al (U.S. Patent No. 6,681,259).

24. As per claim 6 and 19, Stork et al fail to teach a device wherein the receiver operates in accordance with IEEE specifications.

25. However Lemilainen show a device that uses IEEE 802.11 standard for data transmission (column 7, line 55-67). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Stork et al, Bodin et al , Schwartz et al and Lemilainen to create a display device with a receiver that operates in accordance with IEEE specifications because doing so would provide greater flexibility by allowing different types of devices that use different techniques to communicate with the display device.

26. Claims 3, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stork et al (U.S. Patent No. 6,104,380) in view of Bodin et al (U.S. Patent No. 6,311,223) in further view of Schwartz et al (hereinafter Schwartz (U.S. Patent No. 6,473,609) and yet in further view of Anderson (U.S. Patent No. 6,563,535).

27. As per claims 3, 14, and 15, Stork et al fail to teach a device wherein the files are compressed data files, and further comprising a digital signal processor for receiving the compressed data files from the processor, decompressing the data files, and passing the decompressed data to the frame buffer.

28. However, Anderson shows a digital signal processor that contains a compression/decompression engine for compressing and decompressing files, and then transfers data to an input buffer (column 2, lines 30-50 and column 17, lines 50-67). It would have been obvious to one of the ordinary skill in the art to combine the teachings of Stork et al, Bodin et al, Schwartz et al, and Anderson to create a display device with a digital signal processor to compress and decompress files because it would provide for faster data processing when viewing internet files.

29. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stork et al (U.S. Patent No. 6,104,380) in view of Bodin et al (U.S. Patent No. 6,311,223) in further view of Schwartz et al (U.S. Patent No. 6,473,609) and yet in further view of Devins et al (U.S. Patent Publication No. 2004/0054834).

30. As per claim 24, Stork et al fail to teach a method wherein the generating step is performed using a graphics rendering process.

31. However, Devins et al show a method for performing graphics rendering on demand on a graphics subsystem (abstract). It would have been obvious to one of the ordinary skill in the art to combine the teachings of Stork et al, Bodin et al, Schwartz et al and Devins et al to create a display device using a graphics rendering process because doing so would increase graphics speed and efficiency and give the image a realistic look.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Wharton et al (U.S. Patent No. 5,831,664)

b. Hoggarth et al (UK Patent Application GB 2334868A)

c. Karasawa et al (U.S. Patent No. 6,793,352)

d. Borgstom et al (U.S. Patent Publication No. 2002/0080090)

e. Kuroki et al (U.S. Patent No. 6,492,973)

f. Fujiwara (U.S. Patent No. 6,715,881)

g. Ballantyne et al (U.S. Patent No. 5,867,821)

h. Tryding (U.S. Patent No. 5,880,732)

i. Dunlap et al (U.S. Patent No. 6,560,637)

j. Ericsson's Bluetooth modules by Henrick Arfwedson and Rob Snedden (XP-000877966).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramsey Refai
Examiner
Art Unit 2152

RR
July 7, 2005

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100